

Claim 4, line 1, replace "is characterized by" with --comprises--.

5. (Amended) The nucleic acid according to [any previous claim] claim 1, encoding the VDRR polypeptide, comprising a [wherein the] ligand-binding domain (LBD) [of said polypeptide is characterized by] comprising the following amino acid sequence similarity, relative to the LBDs of hVDR and xONR1, respectively:

(i) at least 30% amino acid sequence similarity with the LBD of hVDR; and
(ii) at least 40% amino acid sequence similarity with the LBD of xONR1.

Claim 6, line 1, replace "is characterized by" with --comprises--.

Claim 7, line 1, replace "is characterized by" with --comprises--.

Claim 8, line 1, replace "any previous claim" with --claim 1--.

Claim 9, line 2, after "as" insert --that--.

Claim 12, line 1, insert a comma (,) after "polypeptide"; lines 2-3 delete "or 11".

Claim 13, replace "any of claims 1-9" with --claim 1--.

Claim 14, replace "any of claims 1-9" with --claim 1--.

Claim 16, line 2, replace "any of claims 1 to 9" with --claim 1--.

Claim 18, delete ", preferably human,".

A3

20. (Amended) A method [to produce] for producing specific monoclonal and polyclonal antibodies to the polypeptide according to [any of claim 18 and 19] claim 18, comprising [the injection of the protein] injecting the polypeptide to a mammalian.

21. (Amended) A pharmaceutical formulation comprising an isolated or recombinant VDRR polypeptide according to [any of claim 18 and 19] claim 18, and one or more therapeutically acceptable excipients.

22. (Amended) A method for identifying a ligand to a VDRR polypeptide according to claim 18, comprising contacting the polypeptide with [any of claim 18 and 19, by] a cell-based reporter assay, transgenic-animal reporter assay or *in vitro*-binding assay.

23. (Amended) A method for identifying a substance for treatment of a condition affected by a VDRR polypeptide according to [any of claim 18 and 19] claim 18, comprising screening for an agonist or an antagonist of VDRR-polypeptide signal transduction to be used for treating metabolic, proliferative or inflammatory [condi-tions] conditions.

Claim 29, line 3, replace "polypeptide and wherein" with --polypeptide, wherein--.

A4

30. (Amended) A method for treatment of a metabolic, proliferative or inflammatory condition, [by] comprising administration of a therapeutically effective amount of a substance affecting [VDRR, according to any of claim 18 and 19,] signal transduction of a VDRR polypeptide according to claim 18.

A5

31. (Amended) The method according to claim 30, wherein the substance affecting VDRR signal transduction is a chemical molecule of natural or synthetic origin with a molecular weight in the range of from about 100 up to about 500 Da[, preferably with a molecular weight of about 300 Da].

Please add the following claims 32-41:

--32. (NEW) The nucleic acid of claim 1, wherein the nucleic acid comprises a human nucleic acid.--

--33. (NEW) The nucleic acid according to claim 2 encoding the VDRR polypeptide, comprising a DNA-binding domain (DBD) comprising about 77 amino acids with 9 cysteine residues, wherein said DBD comprises the following amino acid sequence similarity:

- (i) at least 60% amino acid sequence similarity with the DBD of hVDR; and
- (ii) at least 65% amino acid sequence similarity with the DBD of xONR1.--

all
--34. (NEW) The polypeptide of claim 18, wherein the polypeptide comprises a human polypeptide.--

--35. (NEW) A method for treating obesity, diabetes, anorexia, lipoprotein defects, hyperlipidemia, hypercholesterolemia or hyperlipoproteinemia, comprising administering a therapeutically effective amount of a substance affecting signal transduction of a VDRR polypeptide according to claim 18.--

--36. (NEW) A method for treating osteoporosis, rheumatoid arthritis, benign and malign tumors, hyperproliferative skin disorders or hyperparathyroidism, comprising administering a therapeutically effective amount of a substance affecting signal transduction of a VDRR polypeptide according to claim 18.--

--37. (NEW) A method according to claim 35, wherein the substance affecting VDRR signal transduction is a chemical molecule of natural or synthetic origin with a molecular weight in the range of from about 100 up to about 500 Da.--